

Claims

1-39. (canceled)

40. (previously presented) A mold for molding a package for at least one die bonded to a substrate, the mold comprising a first mold portion that defines a package cover for encapsulating the at least one die and a portion of a surface of the substrate to which the die is bonded, and a second mold portion that defines a rib having a thickness at least as great as a solder bump thickness and that projects outwardly from a surface of the substrate opposite the surface of the substrate to which the at least one die is bonded.

41. (currently amended) A mold for molding a package for a plurality of die bonded to a substrate, the mold comprising a first mold portion that defines a package cover for encapsulating the plurality of die and a portion of a surface of the substrate to which the die are bonded, and a second mold portion that defines a plurality of ribs having a thickness at least as great as a solder bump thickness and that projects outwardly from a surface of the substrate opposite the surface of the substrate to which the plurality of die are bonded The mold of claim 40, wherein the first mold portion and the second mold portion define package covers and ribs for a plurality of die bonded to the substrate.

42. (previously presented) The mold of claim 40, wherein the first mold portion is configured to define the package cover to encapsulate at least a portion of the surface of the substrate opposite the surface of the substrate to which the at least one die is bonded.

43. (previously presented) The mold of claim 42, wherein the first mold portion is configured to contact the second mold portion.

44. (previously presented) The mold of claim 42, wherein the first mold portion is configured to define the cover to encapsulate at least a portion of a substrate edge.

45. (previously presented) The mold of claim 42, wherein the second mold portion is configured to encapsulate at least a portion of a substrate edge.

46. (previously presented) The mold of claim 40, wherein the first mold portion is configured to contact the second mold portion.

47-48. (canceled)

49. (currently amended) A mold for molding a package for at least one a plurality of die bonded to a substrate, the mold comprising a first mold portion that defines a package cover for encapsulating the at least one plurality of die and at least a perimeter portion of a surface the surfaces to which the die is die are bonded, and a second mold portion that defines a rib one or more ribs that projects project outwardly from a surface of the substrate opposite the surface of the substrate to which the at least one die is plurality of die are bonded, wherein the first mold portion and the second mold portion define package covers and ribs ~~for-a~~ for the plurality of die bonded to the one or more substrates, wherein the rib one or more ribs defined by the second mold portion has have a thickness at least as great as a solder ball thickness.

50-55. (canceled)

56. (previously presented) A mold for molding a package for at least one die bonded to a substrate, the mold comprising a first mold portion that defines a package cover for encapsulating the at least one die and a portion of a surface of the substrate to which the die is bonded, and a second mold portion that defines a rib having a thickness at least as great as a solder bump thickness and that projects outwardly from a surface of the substrate opposite the surface of the substrate to which the at least one die is bonded, wherein the first mold portion is configured to define the package cover to encapsulate at least a portion of the surface of the substrate opposite the surface of the substrate to which the at least one die is bonded.

57. (previously presented) The mold of claim 56, wherein the first mold portion is configured to contact the second mold portion.

58. (previously presented) The mold of claim 56, wherein the first mold portion is configured to define the cover to encapsulate at least a portion of a substrate edge.

59. (previously presented) The mold of claim 56, wherein the second mold portion is configured to encapsulate at least a portion of a substrate edge.

60. (new) The mold of claim 41, wherein the first mold portion is configured to define the package covers to encapsulate at least a portion of the surface of the substrate opposite the surface of the substrate to which the plurality of die are bonded.

61. (new) The mold of claim 60, wherein the first mold portion is configured to contact the second mold portion.

62. (new) The mold of claim 60, wherein the first mold portion is configured to define at least one cover to encapsulate at least a portion of a substrate edge.

63. (new) The mold of claim 60, wherein the second mold portion is configured to encapsulate at least a portion of a substrate edge.

64. (new) The mold of claim 41, wherein the first mold portion is configured to contact the second mold portion.